ABSTRACT

The coefficients of a chamfer mask are, to within a multiplicative scale factor making it possible to give them an integer value, approximations of the Euclidian distances separating the pixels covered by the mask, from the pixel under analysis placed at the center of the mask. As there are at least two possible integer values for each coefficient, the over- and the under-approximation, one is rapidly faced with a considerable number of possible combinations. The method proposed allows progressive selection of the possible integer values, firstly at the level of each coefficient by virtue of an axis error rate criterion, then at the level of the coefficients considered by binomials by virtue of a sector error rate criterion, which considerably reduces the number of combinations to be analyzed to arrive at an optimal combination from the point of view of the error rate obtained in the distance estimations.